Chester Roe Clouds Report 2 Flow Visualization, undergrad ME Tech Stratocumulus and Altocumulus Clouds Oct 31, 2018 9:55am, Boulder, CO

Cloud Image Report





Before Edit

After Edit

One of my favorite phenomenon in Boulder is a sunny day when the flatirons are covered in snow, with some clouds still stuck in the hills. On this day, I drive to class from Denver, not my usual routine, and thus was coming into the engineering center from a unique view. It was halloween day, with the grass still a beautiful green. The sky was a perfect blue and the white clouds were a perfect contrast. I had to take out my phone to photograph this.

The photo was taken from below the engineering center at CU boulder. The elevation was just around 5,300' according to google maps and was taken almost directly facing SW and directly along the horizon line to the west flatirons. It was 9:55 AM on a Wednesday morning.

This day was sunny, with less clouds in the morning. The clouds passed over as the day went on. The previous day had had a small snow storm, thus leaving the flatirons dusted and leaving the atmosphere with plenty of moisture. As the day heated up, some of the low clouds



could be due to moisture evaporating, or just the low hanging clouds. As can be seen, the cape was 0, so there was a stable atmosphere and not new storms forming. However, we see that the temperature and dew point we're very close, there was a low enough temperature and enough moisture in the atmosphere, especially at the lower elevations, that clouds forming around the 7,000' of the flatirons, and some above, in the altocumulus range, were quite possible.

For this photo, I used an iPhone 7 3.99mm f/1.8 lens. The actual photo was taken at an ISO of 20 because of the abundance of light and was shot in JPEG at 3024x4032 pixels. The lens was zoomed to 18mm and f/10 with a shutter speed of 1/3,096 seconds. I cropped the vertical image down to 3024x3075. Thus shortening it, but narrowing the photo. The only editing I did was take the black point up to 12%.

I love how this photo shows beautiful contrast and snow. These are some of my favorite things in a photo. I don't usually like photos that I have taken that include buildings or any manmade objects, but I think this one captures it well. It provides grounding, but the clouds and scenery and colors are obviously the focus. It is very important to remember to just take cool photos when you see them. You don't always have a good camera around, but when you see something interesting, it is worth taking the 30 seconds to take a few decent photos on your phone, you may be surprised with the outcome.

[1] http://weather.uwyo.edu/cgi-bin/sounding? region=naconf&TYPE=GIF%3ASKEWT&YEAR=2018&MONTH=10&FROM=3012&TO=30 12&STNM=72469

[2] <u>https://scied.ucar.edu/webweather/clouds/cloud-types</u>